

## Coffee Grounds Perk up Compost

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Coffee grounds can be an excellent addition to a compost pile. The grounds are relatively rich in nitrogen, providing bacteria the energy they need to turn organic matter into compost. About two percent nitrogen by volume, used coffee grounds can be a safe substitute for nitrogen-rich manure in the compost pile.

Contrary to popular belief, coffee grounds are not acidic. After brewing, the grounds are close to pH neutral, between 6.5 and 6.8. The acid in the beans is mostly water-soluble, so it leaches into the coffee we drink. Recycling this valuable soil amendment and compost ingredient makes sense both economically and environmentally. The amount of coffee grounds and paper coffee filter produced by the average household can be added to the compost pile with little worry. For those willing to collect coffee grounds from local coffee shops or restaurants, up to 25% of the compost pile material can be coffee grounds. Coffee grounds are considered 'green' materials because of their higher nitrogen content and must be managed accordingly.

Here are some suggestions for using composted grounds in the yard and garden:

- Mix grounds into soil as an amendment. Make sure to keep them damp. Add some nitrogen fertilizer if you do this, as coffee grounds encourage the growth of microbes in the soil, which use up nitrogen. While microbes are breaking down the grounds, the nitrogen will provide a source of nutrients for your plants.
- Spread grounds on the soil surface, then cover them with leaves or bark mulch.
- Add grounds to your compost pile, layering one-part leaves to one-part fresh grass clippings to one-part coffee grounds, by volume. Turn once a week. This will be ready in three to six months.
- Or, put them in an existing unturned pile. Just make sure to add a high carbon source, such as leaves to balance it.
- Grounds may be stored for future use. They may develop molds, but these appear to be consumed during the composting process.
- Paper coffee filters may be composted with the grounds.

Keep in mind that uncomposted coffee grounds are NOT a nitrogen fertilizer. In a lettuce germination test, University of Oregon researchers found that coffee grounds mixed with potting soil at a ratio of 25% by volume resulted in poor germination and stunted growth compared to lettuce planted in straight potting mix. This ratio was too high and reinforces that it's best to let coffee grounds breakdown prior to planting sensitive plants like lettuce. Coffee grounds have a carbon-to-nitrogen ration of about 20 to 1, in the same range as animal manure. Coffee grounds help to sustain high temperatures in compost piles. High temperatures reduce potentially dangerous pathogens and kill seeds from weeds and vegetables that were added to the piles. Coffee grounds seem to improve soil structure, plus attract earthworms.

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